

REMARKS

The Office Action mailed December 1, 2005 has been carefully reviewed along with the references cited therein. In the Office Action, the Examiner indicated that claims 1-2 and 17-20 have been withdrawn. The specification was objected to for minor informalities.

The drawings were objected to for failing to disclose the porous material with interconnected hollow spaces whose porosity changes over to larger pores in the direction toward the development of flame. The drawings were also objected to because reference character "1" has been used to designate both the pore burner and something else about zone A in FIGURE 3. The drawings were also objected to because in FIGURE 3, according to the Examiner, element 3 should be 3". The drawings were also objected to because they did not include the reference signs mentioned in the description: 3"', Zone 5, 6', 6" and 6'''.

Claims 4, 6, 8 and 16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3, 5-9 and 16 were rejected under 35 U.S.C. § 102(b) as being anticipated by Martin et al. (U.S. Patent No. 5,165,884). Claims 3 and 10-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Durst et al. (U.S. Patent No. 5,522,723). Claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Durst et al., as applied to claim 13 above, and further in view of Martin et al. Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Martin et al. as applied to claim 3 above, and further in view of Noakes et al. (U.S. Patent No. 5,110,563).

Claims 1-2 and 16-20 have been cancelled without prejudice.

Drawings

The drawings were objected to for failing to disclose the porous material with interconnected hollow spaces whose porosity changes over to larger pores in the direction toward the development of flame. The transition from small to larger particles in the direction towards the development of the flame is exemplified in FIGURE 2. In particular, the large particles 3 and the small particles 3' cause the change in porosity wherein the small particles 3' serve as a flame barrier.

The drawings were also objected to because reference character "1" has been used to designate both the pore burner and something else about zone A in FIGURE 3. FIGURE 3 has been amended to remove the superfluous reference character "1." More particularly, this reference character has been changed to reference character "3."

The drawings were also objected to because the Examiner indicated that in FIGURE 3 element 3 should be 3". FIGURE 3 has been amended in accordance with the Examiner's suggestions.

The drawings were also objected to because they did not include the reference signs mentioned in the description: 3"', Zone 5, 6', 6" and 6'''. FIGURE 4 has been amended to include reference character 3'''. FIGURE 4a has been amended to include reference characters 6', 6" and 6'''. The first full paragraph on page 25 has been amended to recite Zone C, as opposed to Zone 5.

In view of the amendments made, Applicants respectfully request that the Examiner remove the objections to the drawings.

Claim Rejections - 35 U.S.C. § 112

Claim 4 was rejected for reciting "the combustion product" without proper antecedent basis. Claim 4 has been amended to recite "a combustion product." Accordingly, this should overcome the Examiner's § 112 rejection.

Claim 6 was rejected for lacking antecedent support in the disclosure. Claim 6 finds support in the disclosure at page 7, lines 4-7. Accordingly, this claim does include support in the disclosure and therefore Applicants respectfully request that the Examiner remove the § 112 rejection.

Claim 8 was rejected for reciting "the lateral surfaces," "the side wall," and "the free energy" without proper antecedent basis. Claim 8 has amended to recite "a lateral surface of a side wall of the pre-mix chamber." Accordingly, sufficient antecedent basis is provided for "the lateral surface" and "the side wall." Claim 8 has also been amended to recite "the free energy from detonation of gases in the pre-mix chamber." Detonation of gases inherently include free energy; therefore, the term "free energy" is appropriate.

The Examiner also rejected claim 8 arguing that "in proportion to the volume of the pre-mix chamber is a relative term" which renders claim 8 invalid. Due to the amendments to claim 8 discussed above, the term "in proportion to the volume of the pre-mix chamber"

is defined to provide a standard for ascertaining the requisite degree. Accordingly, Applicants request removal of the § 112 rejection to claim 8.

Claim Rejections - 35 U.S.C. § 102

Claim 3 has been amended to recite "characterized in that said combustion device with combustion temperature of fuel/oxidant mixture above the maximum temperature is designed in that at least one additional supply line connected to a low combustion value gas supply, that allows the temperature during combustion to be lowered to a value below the maximum temperature." Martin discloses a burner having two inlets 31, 32 as illustrated in FIGURE 3. One inlet 31 is connected with a mixer and the other inlet 32 is connected with a burner (column 10, lines 6-11). The mixer serves as a pre-burner for pre-heating the burner. In this respect, the device according to FIGURE 3 is similar to the device according to FIGURE 1 (column 9, lines 43-52). This means, that the inlets 31, 32 and 18, 19 only serve to supply controlled air, fuel and/or processed gas. To the contrary, amended claim 3 recites that the additional supply line is connected to a low combustion value gas supply. Since no low combustion value gas supply is disclosed or suggested in Martin, claim 3 patentably defines over Martin.

Durst discloses a burner having an inlet 2 and an ignition device 6 (column 8, lines 40-47 and FIGURES 1 and 2). Thus the Examiner's opinion is misplaced that the device 6 corresponds to a supply line. Even if the ignition device 6 is considered as a supply line, Durst would not disclose or suggest the connection to a low combustion value gas supply. Accordingly, amended claim 3 also defines over Durst.

In view of the amendments made to claim 3 and that the remainder of the claims depend from claim 3, all claims are in condition for allowance.

CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application are now in condition for allowance. Accordingly, an early indication of the same is earnestly solicited. In any event, should the Examiner consider personal contact advantageous to the disposition of this case, he is encouraged to telephone the undersigned at the number listed below.

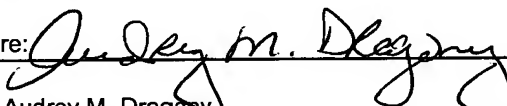
Respectfully submitted,

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